

Fixed Air Monitoring Stations
PR-HQ-04-11505
Questions and Answers 26-27
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Q26. The specified transfer standards and test standards are specified to have diameters larger than 2". Since such standards are readily available in 2" diameters, the desired performance can be met. Would the proposed use of 2" standards and check sources be considered unresponsive ?

A26. The transfer standards for calibrating the radiation detectors will be provided by the Government. Dimensions were specified only to inform the offeror how much additional space needs to be provided in the calibration kit case. The offeror is only required to provide transfer standards for the ambient air temperature and pressure instruments, and the air sampler flow measuring instrument.

Q27. Section C.4 of the specification lays out specific requirements for the presumed beta- and gamma detectors, including such factors as entrance window thickness. Would our proposed use of a multi-layered scintillator detector device for which certain of the specifications do not apply be considered unresponsive ?

A27. The intent of the entrance window thickness specification is to ensure that, for the isotopes expected, the beta instrument *inherently* has no response to alpha particle radiation (Po-214 with a 7.7 MeV alpha is limiting). EPA believes that most types of detectors designed to be rugged enough to meet the environmental operating condition specifications would already have an entrance window meeting this requirement. The type(s) of detectors to be used are not specified; however, if they do not have an entrance window thick enough to stop 8 MeV alpha particles, then additional shielding material must be provided between the air filter and the detector. Although it may be an acceptable approach for differentiating beta from gamma radiation provided that all performance requirements are met, for this application EPA considers it unacceptable to discriminate alpha particle radiation solely by electronic means such as pulse energy or rise time.